

The following is claimed:

1. A printing system comprising:
  - at least one input source for storing a medium prior to printing;
  - at least two output destinations for holding or processing the medium after the printing;
  - a user interface to support a user's selection of one of the output destinations for any sheet of a print job in the at least one the input source prior to the printing;
  - a central processing unit configured to determine a pattern of media feeds for each output set of a print job to achieve a desired appearance characteristic of sheets for the output set.
2. The system according to claim 1 wherein the at least one input source comprises an input paper tray.
3. The system according to claim 1 wherein the at least one input source comprises a first dispenser containing a first media with unprinted tabs in different positions on the first media, a second dispenser containing a second media having different colors, and a third dispenser containing a third media with tabs having printing thereon.
4. The system according to claim 1 wherein the pattern comprises a page identifier associated with a printing indicator and a particular output destination.
5. The system according to claim 4 wherein the printing indicator indicates whether or not the printing system is supposed to print on a page of the output set associated with the corresponding page identifier.
6. The system according to claim 1 wherein the output destinations comprise output paper trays.
7. The system according to claim 1 wherein the output destinations are associated with corresponding processing stations for processing pages of the print job on a page-by-page basis.

8. The system according to claim 1 wherein the central processing unit includes a jam handler for providing jam resolution instructions on a display of the user interface.

9. The system according to claim 1 wherein a user request for a print job comprises requesting one particular input source and one particular output destination for affiliation with a page identifier of the print job.

10. The system according to claim 1 wherein the output destinations include a first output destination, a second output destination, and a third output destination; the central processing unit determining a pattern of distribution to the first output destination, the second output destination, and the third output destination to facilitate different post-printing procedures on individual pages of the output set of the print job.

11. The system according to claim 1 wherein the printing system routes a page to a requested output destination or a primary output destination based upon a comparison of a feed count value to at least one target value, wherein the feed count value represents a running count of a number of pages of the output set that have been fed through the printing system from the at least one input source to at least one of the output destinations.

12. The system according to claim 1 wherein the printing system routes a page to a selected output destination, among the output destinations, if feed count value is not less than or equal to a first target or if the feed count value is greater than a second target, where the feed count value refers to a running count of the number of pages that have been fed through the printing system and where the first target and the second target, in effect, establish a range of pages for certain page identifiers.

13. The system according to claim 12 wherein the first target and the second target may be expressed as the following equations, respectively:

$$T_1 = F_s * R_o / (R_s - T_A)$$
where  $T_1$  is the first target which represents a highest priority job exit feed target,  $F_s$  is a specific feed count which represents a cumulative feed count for a particular job exit,  $R_o$  is an overall request sum which

represents the sum of feed requests for any or all job exits,  $R_s$  is a specific request sum, and  $T_A$  is a target adjustment which represents an adjustment of at least the first target.

$T_2 = F_s * R_o / (R_s + (1 - T_A))$ , where  $T_2$  is the second target which represents a lowest priority job exit feed target,  $F_s$  is a specific feed count which represents a cumulative feed count for a particular job exit,  $R_o$  is an overall request sum which represents the sum of feed requests for any or all job exits,  $R_s$  is a specific request sum, and  $T_A$  is a target adjustment which represents an adjustment of the first target and the second target.

14. The system according to claim 1 wherein a user makes a pattern request by entering the a selection into buttons, associated with the user interface, on a page-by-page basis with a respective choice of output destinations for each page of the output set.

15. A method of printing comprising the steps of:  
storing a medium in at least one input source prior to printing;  
supporting a user's selection of an output destination, among two or more output destinations, for any sheet of a print job in the at least one input source prior to the printing;  
determining a pattern of media feeds for each output set of the print job to achieve a desired appearance characteristic for the output set or a desired assembly of the sheets of the output set.

16. The method according to claim 15 further comprising the step of:  
creating media feed instructions based on the pattern of media feeds.

17. The method according to claim 15 wherein the determining step further comprises associating a page identifier with a printing indicator and a particular output destination to form the pattern of media feeds.

18. The method according to claim 17 wherein the printing indicator indicates whether or not the printing system is supposed to print on a page of the output set associated with the corresponding page identifier.



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25. The method according to claim 24 wherein the first target and the second target may be expressed as the following equations, respectively:

$T_1 = F_s * R_o / (R_s - T_A)$ , where  $T_1$  is the first target which represents a highest priority job exit feed target,  $F_s$  is a specific feed count which represents a cumulative feed count for a particular job exit,  $R_o$  is an overall request sum which represents the sum of feed requests for any or all job exits,  $R_s$  is a specific request sum, and  $T_A$  is a target adjustment which represents an adjustment of at least the first target.

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 $T_2 = F_s * R_o / (R_s + (1 - T_A))$ , where  $T_2$  is the second target which represents a lowest priority job exit feed target,  $F_s$  is a specific feed count which represents a cumulative feed count for a particular job exit,  $R_o$  is an overall request sum which represents the sum of feed requests for any or all job exits,  $R_s$  is a specific request sum, and  $T_A$  is a target adjustment which represents an adjustment of the first target and the second target.

26. The method according to claim 15 wherein the determining step comprises the step of:

entering a selection of the pattern into buttons, associated with a screen of the user interface, on a page-by-page basis with a respective choice of output destinations for each page of the output set.

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